

BELKIN

®

Wireless Internet Connection

PCS Installation

For Windows® 95,
98, 2000 and NT 4.0

Belkin Components

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Welcome to Belkin

Say good-bye to fumbling for a wall jack for your modem cable. Belkin Wireless Internet Connection is the mobile alternative to a computer modem. Your web enabled cell phone performs all the functions of a wireless phone and conventional modem. Have your notebook or desktop computer connect over your carrier's network. Expand your freedom of communication by sending and receiving information around the clock, everywhere.

Your computer recognizes your web enabled cell phone as it would any modem, but you'll experience the difference. Surf the Web, respond to e-mails or fax colleagues and friends away from home and the office.

Even though your web enabled cell phone does everything your stationary modem did, there's no modem in the phone. The modem is part of your carrier's network. All the phone does is connect your computer with the network's modem. Conversely, the network modem interacts with your designated computer or network, such as your service provider.

Feel free to use your traditional cabled modem when you have easy access to a wall jack or would like to use any special services your modem provides. There will be times when the wall jack isn't convenient, and you'll be glad to have your web enabled cell phone handy. Your web enabled cell phone is a second modem that's built to travel.

Installation Instructions for Windows® 95, 98 and 2000 Operating Systems Users

You're ready to install the Belkin Wireless Internet Connection on your Windows 95, 98 and 2000 Operating system. All you need to get started are:

- **A PC-compatible computer** with at least an Intel 486 processor, no less than 16MB of RAM, 1MB of space available on your hard drive, VGA or a more advanced video display, a CD-ROM drive (contact us for installation software on 3.5" floppy diskettes), and a free serial (or COM) port
- **An activated web enabled cell phone.** Please call your carrier about activating your web enabled cell phone
- **Data cable** that came with your Belkin Wireless Internet Connection (At opposite ends of the data cable are a 9-pin female serial connection and a phone connector)
- **The installation CD-ROM** that came with your Belkin Wireless Internet Connection

All these items equip you to make full use of your Belkin Wireless Internet Connection.

Attaching Your Phone to Your Computer

Please follow these steps to prepare your web enabled cell phone for action:

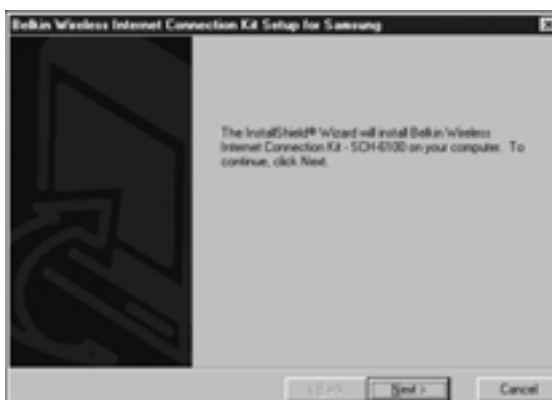
1. Whether your phone is switched 'On' or 'Off', you can now attach the phone connector end of the data cable to your phone port. Depending on your phone model, you may have to open a cover to access the port.
2. Your serial port has 9 pins and is usually found in the back or side of the computer. Disconnect any other device that's using this port before connecting the large connector of your data cable to the serial port. Be sure to tighten the screws once the connector is in place.
3. You may now switch on your phone and computer if they're not already running.

Installation Windows® 95, 98 and 2000

Installing Belkin Software

A series of screens will guide you through the steps for installing Belkin Wireless Internet Connection software on your Windows® 95, 98 or 2000 system. You will be clicking 'Next' to advance between screens.

1. To activate the installation program, place the Belkin CD-ROM into your CD-ROM drive. If the CD-ROM doesn't automatically begin, click on the "Start" menu and then go to the "Run" command. In this field, type either "D:\Setup.exe" and hit 'Enter'. You may need to enter another letter drive, depending on the location of your CD-ROM drive.
2. The install wizard will now ask you if you would like it to start the installation process on your computer.



Installation Windows® 95, 98 and 2000

3. Be sure to read the User License Agreement carefully. If you accept the terms, answer 'Yes' and then continue with installation.



4. Next you must choose a destination location. Select folder where setup will install files.



Installation Windows® 95, 98 and 2000

5. Please select a program folder. Setup will add program icons to the program folder listed.



6. Now setup will check to see if DUN has been installed. If it has, you will not be prompted to do anything. If DUN was not detected, a dialog will come up informing you that DUN is going to be installed.
7. Setup will now attempt to install your web enabled cell phone as a modem. If it is unsuccessful the Add New Hardware Wizard will begin. In that case, follow the screen instructions and refer to the computer users manual for making selections.
8. Please make sure that your phone is attached to the PC and the power is On. Press Auto Detect to determine which COM Port the phone is plugged into, or choose a COM Port. Press OK to assign the phone to the selected COM Port.
9. Setup has now finished installing the Belkin Wireless Internet Connection on your computer.

* Windows® 2000 has its own procedures for installing Dial-up Networking. Please follow the installation section of the Windows 2000 User Guide.

Congratulations! You're ready to reap the advantages of wireless computing.

Installation Instructions for Windows® NT Users

Before you begin installing your Belkin Wireless Internet Connection on your Windows® NT operating system, please verify that your system can support this software. You will need:

- **A PC or PC-compatible computer** with a Windows NT 4.0 operating system, at least 16 MB RAM, 1 MB space free on your hard drive, Intel 486 or above processor, available serial (COM) port, and CD-ROM drive.
- **An activated web enabled cell phone.** Please call your carrier about activating your web enabled cell phone
- **The CD-ROM and data cable** that were included with your Belkin Wireless Internet Connection. Verify that one end of the data cable has a 9-pin female serial connection and the other end has a customized phone connector.

Attaching the Phone to Your Computer

These steps will prepare your phone for action.

1. It makes no difference whether your phone is 'On' or 'Off'. You can connect the phone connector end of the data cable to your phone port. Depending on your phone model, you may have to open a cover to access the port.
2. Your serial port has 9 pins and is usually found in the back or side of the computer. Disconnect any other device that's using this port before connecting the large connector of your data cable to the serial port. Be sure to tighten the screws once the connector is in place.
3. You may now switch on your phone and computer if they're not already active.

Installing Belkin Software

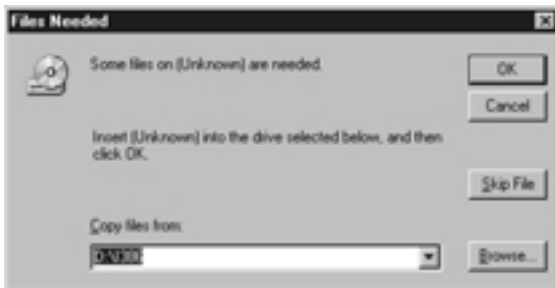
1. Insert Belkin/Belkin CD into CD-ROM drive.
2. From "Chooser" menu, select the model phone you wish to install as a modem.
3. If "Dial-up Networking Not Installed" dialog appears while installing, follow the instructions below. If not, skip to Step 4.
 - a. Close the Install program.
 - b. Remove Belkin/Belkin CD from your CD-ROM drive.
 - c. Open "My Computer".



- d. Double click "Dial Up Networking" dialog box.
- e. When prompted, click "Install"



- f. Insert your Windows NT 4 disc into your CD-ROM drive.
- g. Click "OK"



Installation Windows® NT

- h. When prompted with "Remote Access Setup" click "YES".



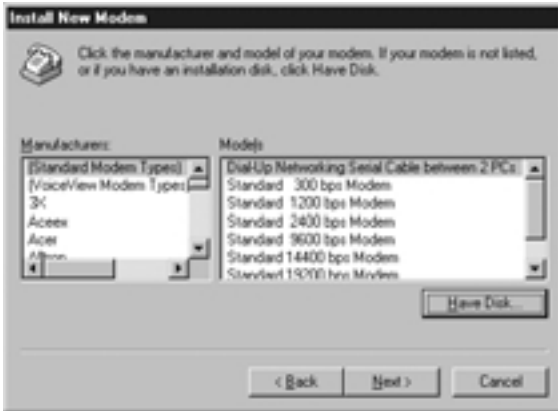
- i. When prompted to "Install New Modem", check "Don't detect my modem, I will select it from a list".
- j. Click "NEXT".



- k. Remove Windows NT 4 disc from your CD-ROM drive.
- l. Insert Belkin/Belkin CD.

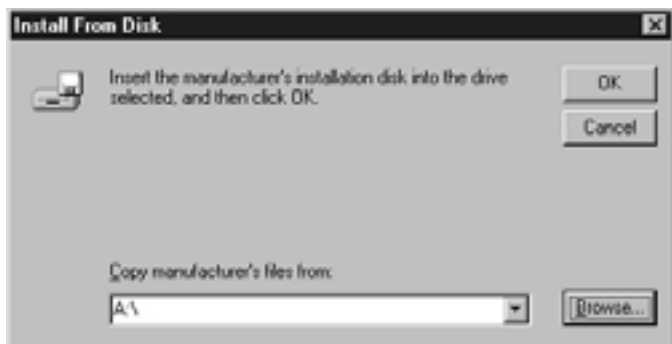
Installation Windows® NT

- m. When the "Modem Chooser" appears, click "Cancel"
- n. Select "Have Disk" from "Install New Modem" screen.



Installation Windows® NT

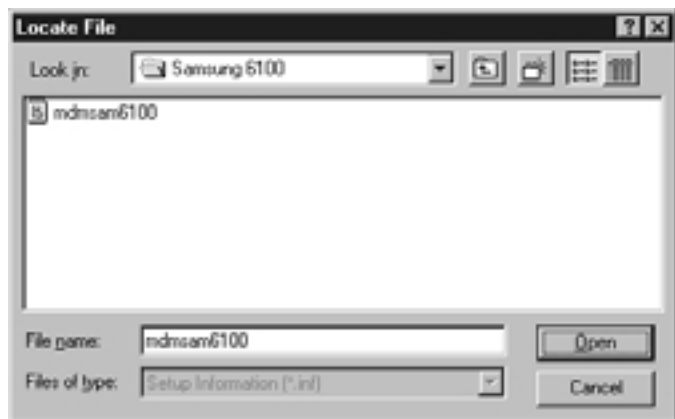
- o. When prompted to "Install From Disk", choose "Browse".



- p. Browse to CD-ROM drive and double click the phone you wish to install as a modem.



- q. Click "OPEN".



- r. When brought back to "Install From Disk" dialog, click "OK".

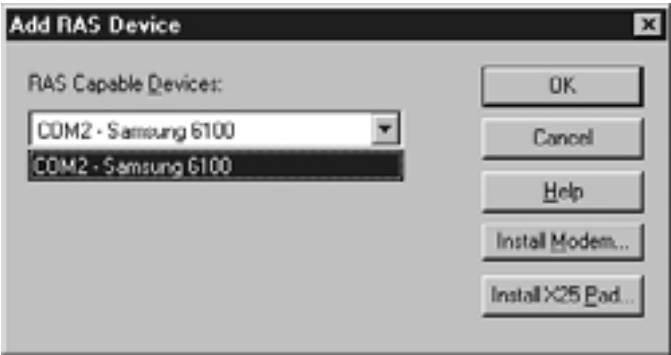


Installation Windows® NT

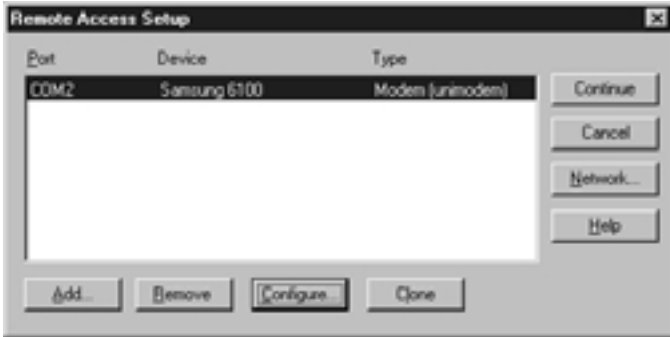
- s. Select desired COM Port you wish to install the phone on and click "NEXT".



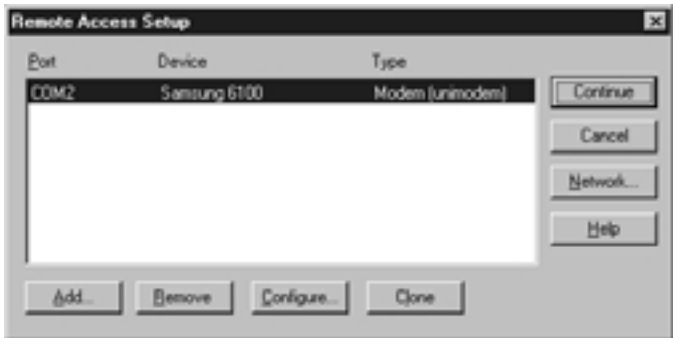
- t. When prompted to "ADD RAS DEVICE", select the phone you are installing from the drop down menu and click "OK".



- u. When "Remote Access Setup" menu appears, select the phone you are installing and click "CONFIGURE".



- v. When prompted to "Configure Port Usage", select "Dial Out Only" and click "OK". If you wish to configure your cellular phone to Dial Out and Receive calls, you will need to configure TCP/IP to your needs.
- w. When brought back to "Remote Access Setup" screen, click "CONTINUE", then click "OK".



Installation Windows® NT

- x. Click "FINISH" to complete Dial Up Networking Install.
 - y. Go back to Step 1.
-
- 4. Continue through Setup until "Modem Properties" menu appears.
 - 5. If your phone is not on the list shown, click "ADD". If your phone is already on the list, click "CLOSE" and skip to Step 17.
 - 6. From "Install New Modem" menu, select "Don't detect my modem, I will select it from a list" and click "NEXT".
 - 7. Browse to and select the phone you are installing as a modem and click "NEXT".
 - 8. When prompted click "Finish".
 - 9. When brought back to "Modem Properties" menu, click "CLOSE".
 - 10. When prompted to "ADD RAS DEVICE", click "YES".
 - 11. Once at "RAS SETUP" menu, click "ADD" and select your modem from the drop down menu.
 - 12. Click "OK".
 - 13. From "RAS SETUP" menu, click "CONFIGURE".
 - 14. When prompted to "Configure Port Usage", select "Dial Out Only" and click "OK".
 - 15. When brought back to "RAS SETUP" menu, click "CONTINUE".
 - 16. When prompted to Restart, DO NOT RESTART!
 - 17. When brought back to Install, select "Finish Install and Restart Computer".

Common Questions

Batteries

1. **Question:** Why does the amount of airtime between battery charges seem to fluctuate?

Answer: Some possible reasons for inconstant battery life are that low signal strength saps additional energy to transmit and receive signals; and sending data demands more power than receiving data.

2. **Question:** Is it possible to charge my battery while using the Belkin Wireless Internet Connection?

Answer: Some models of web enabled cell phones work with external power and data connectors, but most of these phones share the same port for recharging the battery and data activity. Therefore, both the data cable and battery charger can't be connected simultaneously. In this case, we suggest that you watch battery strength levels when you're using the Belkin Wireless Internet Connection. We recommend that you use a second battery if you're apt to use the wireless internet for extended periods.

3. **Question:** What should I expect to occur if my charge expires during a wireless data call?

Answer: Your call will be cut off. To avoid recurrences, be sure to monitor your battery charge during data and fax calls.

Web enabled cell phone vs. External Modem

1. **Question:** What features distinguish my web enabled cell phone from a standard external modem?

Answer: Clearly, the web enabled cell phone is wireless and a conventional modem isn't, but an even greater difference is that your web enabled cell phone doesn't contain a modem. The carrier network embodies the modem, even though your computer treats your web enabled cell phone as if it were a 14400 bps external serial modem.

Common Questions

Connection Speed

1. **Question:** How come my computer states that I'm connected at a higher data transfer rate than my modem can accommodate? A message might say "Connected at 19200 bps" despite my web enabled cell phone's maximum connection rate of 14400 bps.

Answer: Your computer is reporting the data speed through the cable between your computer and phone. The system communication speed from your phone and the carrier network is no more than 14400 bps.

2. **Question:** Why doesn't my data transmission speed accelerate when my signal is especially strong?

Answer: The data transmission speed won't increase because it isn't determined by signal strength.

3. **Question:** Am I able to use a faster internal modem with my web enabled cell phone for wireless data calls?

Answer: No. A web enabled cell phone shares little in common with a wireless phone jack. Other modems cannot be used with your Belkin Wireless Internet Connection.

Dial Tone

1. **Question:** Shouldn't I hear normal dialing sounds when I place a wireless call?

Answer: Only if you were using an ordinary modem. Those familiar dial-tone sounds correspond to modem calls placed on conventional analog phones. The Belkin Wireless Internet Connection transmits calls by digital signals through the carrier network. It follows that you don't hear dial tones when you make a voice call on your web enabled cell phone.

Disconnects

1. **Question:** What will occur if I disconnect the data cable during a call?

Answer: The call will be lost. Even so, it's not unusual for the computer software to continue as though the call were still on. But it will acknowledge the disconnection after a short time.

Ending Fax or Data Calls

1. **Question:** Am I risking damage to my web enabled cell phone when I end fax or data calls by pressing END or folding my flip phone? Is it wiser to terminate communications by shutting the phone off?

Answer: First of all, ending wireless data calls by phone poses negligible if any risks at all. Nevertheless, we caution you that this practice may affect your software. Play it safe by terminating your calls through your software program.

Modem

1. **Question:** Is there a modem embedded in my web enabled cell phone?

Answer: No. The carrier network fills the role of modem. However, your computer can't distinguish the web enabled cell phone from a physical modem.

Service Provider

1. **Question:** What does a service provider or Internet service provider do?

Answer: Your modem gains access to the server or computer of your service provider. Depending on the service provider, guests or registered subscribers have different levels of access ranging from specific systems to the Internet and World Wide Web, as provided by Internet service providers (ISPs). An employer that allows you "dial-in" access to its servers plays the role of service provider.

Signal

1. **Question:** How intense does my signal have to be to use the Belkin Wireless Internet Connection?

Answer: If your phone's display says it has found a signal, you should be able to communicate on your web enabled cell phone. The phone only confirms signals strong enough to make calls. If you're able to place a voice call, you'll also be able to make a wireless data call.

2. **Question:** Will a weak signal cause the data transmission to decelerate?

Answer: Signal strength should not affect data speed. But signal interference may lengthen transfer times.

Troubleshooting

I. Problems

Your computer doesn't acknowledge your phone.

Or you're unable to make a fax call.

Or your phone doesn't follow AT commands.

Or you're unable to make a data call.

1. Diagnosis

Your phone isn't able to interact with the carrier network.

Recommendation

Without changing the phone number on your wireless data call, dial the fax or data number on your phone as if it were a voice call. That familiar modem rumble is the sound of success clearing you to make a wireless data call. However, if the voice call fails, you can't place a wireless data call.

2. Diagnosis

Your phone and computer aren't communicating correctly with each other.

Recommendation

Turn your phone off while leaving your data cable connected. Next, switch the phone on again.

3. Diagnosis

Your phone is off.

Recommendation

Turn it on.

4. Diagnosis

The COM (communications) port is occupied by the synchronization software of a portable device.

Recommendation

Deactivate or switch off the synchronization software.

5. Diagnosis

Another software program is keeping the COM port busy.

Recommendation

Locate the software that's occupying the COM port and command it to stop.

6. Diagnosis

The COM port isn't available.

Recommendation

Consult your computer's user manual for advice on controlling your COM ports.

7. Diagnosis

The cable between the phone and the computer isn't properly connected.

Recommendation

Verify that you're using the proper cable and that both ends of the cable are attached firmly to their ports.

8. Diagnosis

Your COM port is taken up by your fax software, which is set on 'Auto Answer'.

Recommendation

Halt 'Auto Answer' used by your fax software.

Troubleshooting

9. Diagnosis

Your computer has access to two modems, but your software is set on the modem that isn't your web enabled cell phone.

Recommendation

Your telecommunications software must be configured to work with your web enabled cell phone instead of the other modem.

II. Problems

You can't make any calls.

Or your phone won't follow AT commands.

Or your computer doesn't acknowledge your web enabled cell phone.

1. Diagnosis

There might be damage to your data cable adapter or the data cable itself.

Recommendation

Examine the pins or contact points of both ends of your cable and adapter. Bent or misaligned pins amplify the need for a new cable or adapter.

2. Diagnosis

The COM ports and IRQs are incompatible.

Recommendation

Consult your computer's user manual for information on your COM ports.

III. Problem

You're unable to connect with a number you've dialed.

1. Diagnosis

You've dialed the wrong phone number.

Recommendation

You might need to contact your service provider to verify that the number, including area code, is correct.

2. Diagnosis

It's not uncommon to find that you are automatically entering a '9' before dialing the phone number.

Recommendation

Delete any unnecessary outside-line prefixes from phone numbers.

3. Diagnosis

The modem you're trying to reach is deactivated.

Recommendation

Your service provider can update you on the status of their servers and modems in your area.

4. Diagnosis

The wrong domain name has been entered.

Recommendation

Check to make sure that you have the correct domain name to reenter.

Troubleshooting

IV. Problem

Your call falls through as soon as it's dialed.

1. Diagnosis

Some service providers aren't adapted to low bandwidth calls.

Recommendation

Please consult your service provider.

V. Problem

You receive a busy signal.

1. Diagnosis

All available lines at your service provider are in use.

Recommendation

Immediately attempt another call.

VI. Problem

You're alerted to an authentication failure.

1. Diagnosis

Your password or user name may be wrong.

Recommendation

Verify that your password and user name are entered correctly.

VII. Problem

Your call fails after a ring or two.

1. Diagnosis

Your signal is weak.

Recommendation

Attempt your call again.

2. Diagnosis

Your battery is low or out of energy.

Recommendation

Your battery will need to be recharged or replaced with a fresh battery.

VIII. Problem

The phone rings indefinitely without an answer.

1. Diagnosis

Your service provider may be experiencing network difficulties and therefore cannot respond to incoming calls.

Recommendation

Attempt your call again.

IX. Problem

When you attempt to use the phone, your computer freezes up or crashes.

1. Diagnosis

The COM ports and IRQs (interrupt requests) aren't cooperating.

Recommendation

Check your computer manual for guidance on coordinating your COM ports.

Troubleshooting

X. Problem

Your computer is emitting dial tones. Or your computer cannot detect a dial tone.

1. Diagnosis

More than one modem has been set up in your computer, and the software is using another modem instead of your phone.

Recommendation

You'll need to configure your software to work with your web enabled cell phone instead of the other modem.

XI. Problem

Even though you hear the dialing sounds, no connection is made.

1. Diagnosis

Of the two or more modems set up on your computer, the software is working with another modem instead of your web enabled cell phone.

Recommendation

Your software must be configured to work with the web enabled cell phone instead of the modem.

XII. Problem

The installer program cannot locate your web enabled cell phone and settles on the incorrect COM port.

1. Diagnosis

The proper COM port isn't working with the installer.

Recommendation

The Windows Device Manager can verify that all COM ports are functioning properly. You may need to disable a COM port. However, if you're aware which COM port accommodates your web enabled cell phone, please click the 'Advanced' tab to go beyond the COM port search.

XIII. Problem

Even though your software displays a connection, your web enabled cell phone call hasn't connected.

1. Diagnosis

Your software hasn't acknowledged that that your call has failed.

Recommendation

Command your software to end the call and try phoning again.

XIV. Problem

Your web enabled cell phone disconnects during communication with a different modem.

1. Diagnosis

The other modem has terminated the call.

Recommendation

Attempt your call again after you verify that the cables between your web enabled cell phone and your computer are properly connected.

2. Diagnosis

Because you haven't issued any commands for an extended period of time, your call has been disconnected.

Recommendation

Software tends to disconnect after a certain number of minutes of inactivity. Your software may be able to increase the period before a call is terminated.

Troubleshooting

XV. Problem

Your mouse or cursor is malfunctioning.

1. Diagnosis

A serial mouse does not work seamlessly with COM ports.

Recommendation

Your computer's user manual should assist you on working with your COM ports.

XVI. Problem

According to your phone, the call is connected, but the software disagrees.

1. Diagnosis

The software times out because the call took too much time to go through.

Recommendation

Lengthen the time-out period on your software and call again.

